

**Notice of Allowability**

Application No.

09/840,055

Applicant(s)

DEGROOTE ET AL.

Examiner

Ted T. Vo

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/12/05.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 12/09/05.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 12/7/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

*Ted Vo*  
TED T. VO  
Primary Examiner

**EXAMINER'S AMENDMENT**

1. This communication is in response to the amendment filed on 10/12/05.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Grossman David, Attorney/Agent Reg. No. 42,609, on 12/07/05.

3. Examiner amendment is given to amend Claim 13 filed in the amendment on 10/12/05 for resolving 112 second paragraph issue remaining in claims in order to place the application in the condition for allowance.

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4. **In the Claims:**

Please amend Claim 13 as follows:

Claim 13 (current amended) ~~A tangible computer-readable medium encoded with instructions, wherein execution of the instructions by one or more processors causes the "one or more processors" to perform steps~~ method for generating a live component, the method executable by one or more processors executing instructions residing on a tangible computer-readable medium, the method comprising:

- (a) opening an initial live component with a live component editor;
- (b) iteratively updating said live component by;
  - (i) selecting an operand for modification;
  - (ii) selecting a step from the group of steps consisting of:
    - (1) modifying the properties of said selected operand; and
    - (2) inserting an additional operation selected from a library of pre-built application modules that operates on said operand using predetermined rules that correspond to said additional operation, said pre-built applications modules including a rendering module and an equation evaluation module;
- (c) saving the modified live component by:
  - (i) creating a live component viewer using said pre-built application modules directed by said rules based editor; and
  - (ii) creating a live component description file directed by said rules based editor;

wherein said live component includes said live component viewer and said live component description file.

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5. The amendment and arguments filed on 10/12/05 have been considered.

The Drawings filed on 04/24/01 are accepted.

Prior art of record, Wang, "Design and Protocol for Internet Accessible Mathematical Computation", 1999, remains the closest art in searching.

### ***Drawings***

6. It requires correcting the Drawings at page 8. **Figure 8C is listed as Figure 8A.** The corrected drawing as "replacement sheets" must be submitted.

### **Reasons for Allowance**

7. Claims 1-25 are allowed.

Prior of record, Wang discloses a computer architecture overview used for online mathematical computations. Wang show a client's computer using an Editor connected with a file system via an GUI, where the file system is known containing all files created by a user using that editor (or created by a standard computer Windows, or downloaded from network) (Figures 2-3). This editor is used for creating or editing mathematical computation components in MathML, OpenMath. The display of mathematical computations is supported with GIF, HTML, XML. The Wang's computer architecture overview complies with the standard computer Windows. As noted by the Wang, the computer station, in which he uses to develop online components for mathematical operations, employs the elements such as MathML, OpenMath, Java Package resided/located in the file system. The operations act like a computer Engine (Figure 5). Furthermore, Wang discloses using HTML and Java languages (p.291: right column), in combined with such components supported by MathML, MP, etc., to create math viewer of the components, where it has been known that a webpage is created customarily using the combination of HTML and Java programs/Java scripts, etc.

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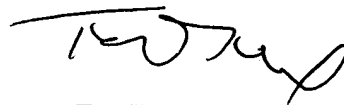
However, in the remarks filed on 10/12/05, Applicants pointed out this Editor is not their Live Component Editor (Remarks: Page 12). Applicants pointed out that these elements, such as MathML, OpenMath, Java Package resided/located in the file system, are not their resource library (Remarks: pages 12, 5-8). Applicants further pointed out that a webpage which is created customarily for displaying mathematic computations as shown by Wang is not custom live components viewer from pre-built application modules (Remarks: page 12: last three lines and pages 13: lines 1-7).

Therefore, the following is an examiner's statement of reasons for allowance: The cited prior arts taken alone or in combination fail to teach claimed invention comprising features, as recited in independent Claim 1, and in such manners in independent Claim 13.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ted T. Vo  
Primary Examiner  
Art Unit 2191  
December 9, 2005